

**Meeting Summary  
DNR Clean Air Act Task Force  
November 19, 1999 – Madison, WI**

**Participants:** Ed Wilusz, Wisconsin Paper Council; Hank Handzel, DeWitt Ross & Stevens (for Printing Industries of Wisconsin and Wisconsin Paper Council); David Donovan, Northern States Power Co.; Harold Frank, Dairyland Power Cooperative; Patrick Stevens, WI Manufacturers & Commerce; Kathleen Standen, Alliant Energy; Gary Van Helvoirt, Wisconsin Public Service Corp.; Kris McKinney, Wisconsin Electric Power Co.; Michael Ricciardi, Madison Gas & Electric; Lou Skibicki, RTP Environmental Associates; Chris Kocaja, Mann Bros. Inc.; Jim Beasom, Appleton Papers Inc.; Martin David, University of Wisconsin-Madison; Deirdre Elliott, Badger Meter, Inc.; Ken Yunker, Southeastern Wisconsin Regional Planning Commission; Peter Beitzel, Metropolitan Milwaukee Association of Commerce; Tom Walker; Wisconsin Transportation Builders Association; Rob Kennedy, Citizens for a Better Environment; Brian Mitchell, Cook & Franke; Jeff Schoepke, Governor Thompson's Office; Todd Palmer and Erin MacArthur, DeWitt Ross & Stevens; Marc Bentley, Wisconsin Motor Carriers Association; Erin Roth, Wisconsin Petroleum Council; Michael Allen, Stafford Rosenbaum Rieser & Hanson; Kendra Bonderud, Legislative Fiscal Bureau; John Stolzenberg, Legislative Council; Robert Fassbender, Hough Fassbender Osborne & Associates; Hampton Rothwell, Wisconsin Dept. of Commerce; Sally Jenkins, Wisconsin Public Service Commission; Neil Howell and John Etzler, WI Dept. of Administration; Patricia Trainer, Steve Hirshfeld, Tanace Matthiesen, Wisconsin Dept. of Transportation; Mary Jo Kopecky, DNR Division of Air & Waste Management; Lloyd Eagan, Larry Bruss, Bob Lopez, Tom Karman, Anne Urbanski, Wisconsin DNR Bureau of Air Management; Jerry Medinger, DNR Southeast Region.

**Handout:** 1 Hour Ozone SIP Development (Lopez).

**Next meetings:** *Four meetings have been scheduled in early 2000: January 6, January 27, February 17 and March 9 (all Thursdays).* Exact times and locations will be sent out when known. (Check DNR website.)

**Discussion:**

**Review and approval of October 8, 1999 minutes** – Bob Fassbender said the meeting summary left the impression that only DNR staff and Walter Blaedel spoke at the meeting. He asked that the summary be corrected as follows: "Certain members expressed concerns about schedules and timing." Summary was approved as corrected.

**Review and approval of November 19 agenda** – Larry Bruss said he needed to switch the first two agenda items, so he would speak about the attainment test for the one-hour ozone standard first, then the modeling results. No objections were expressed.

**One-hour ozone standard attainment test** – Bruss said the attainment test is the measure by which the DNR will evaluate selected strategies and control programs for meeting the EPA's one-hour ozone standard. DNR is operating under June 1996 guidance from EPA, which allows an area to have up to 3 exceedances of the one-hour standard in a 3-year period. There are two approaches to determining attainment. The "deterministic" approach says that a state has to show that ozone concentrations in all modeling grid cells are less than 125 parts per billion (the level which is officially an exceedance of the ozone standard) on all episode days. This is a difficult test to pass. The "statistical" approach allows an area to have modeling exceedances on days that are known to have severe meteorological conditions such as several consecutive 100-degree days (e.g. the July 1995 heat wave) in order to better mirror the form of the ozone standard. To use the statistical test an area must pass three benchmarks, which include: not more than 3 severe days which can show exceedances, ozone concentrations below a certain threshold for severe days (varies by area), and an 80% reduction in the number of grid cells with ozone levels above 124 ppb, according to the model. If the area doesn't pass all three benchmarks, a state can use a "weight of evidence" approach to show EPA that it will be able to attain the ozone standard. This weight of evidence can include trends in air quality data and emissions, incremental costs and benefits of using certain controls to reduce ozone concentrations in specific locales, and a "relative reduction factor" which shows predictions of relative reductions of ozone concentrations.

Bob Fassbender remarked that DNR seems to have some discretion as to which attainment demonstration options it uses, and asked whether DNR's approach was similar to that other states in the region. Bruss said Wisconsin is working with Illinois, Indiana and Michigan (the other three states in the Lake Michigan Air Directors Consortium) as well as Kentucky, Tennessee, Missouri and Iowa, to develop a joint attainment demonstration for the Lake Michigan region. Bruss noted that deciding what to submit as "weight of evidence" will involve some political decisions; Fassbender asked how DNR expects the political decisions will be made. Bruss replied that DNR

will take input from the Clean Air Act Task Force participants, hold public meetings and hearings, and present to Governor Thompson for discussion within his Cabinet. Additionally, Wisconsin will need to negotiate the attainment demonstration with its upwind neighbors (primarily Illinois) and with EPA.

**Preliminary modeling data** – Bruss presented various overheads showing results of attainment modeling runs using four past episodes of high ozone concentrations – June and July 1991 and June and July 1995. Three of the four episodes meet the statistical benchmark for severe ozone days. Thus far modeling has been completed and evaluations made on seven possible control strategies, each of which uses a slightly different scenario to see how much improvement would occur with specific type(s) of additional emission controls. Strategy 6 simulates the “NOx SIP call” (EPA’s plan for reducing ozone transport in the eastern United States), specifying stringent controls on nitrogen oxide emissions from electric utility and manufacturing boilers statewide with heat input greater than 250 million BTU. Bruss said that even using Strategy 6, southeastern Wisconsin does not pass the deterministic attainment test, nor does it pass any of the statistical tests. This means, Bruss said (in response to Tom Walker), that even if neighboring states reduce their NOx emissions to the levels required by the NOx SIP call, southeastern Wisconsin still does not pass the attainment test. The four-state Lake Michigan region also does not pass the second benchmark test, which allows somewhat higher ozone levels on days with extreme summer weather. Fassbender asked if Wisconsin would have a better “shot” at attainment if the state submitted its own individual attainment demonstration. Bruss replied that Wisconsin can’t attain the ozone standard without help from its upwind neighbors, and because the state contributes to downwind states’ ozone problems, the regional attainment plan must be negotiated at three levels – within the state, among the 4 LADCO states, and among the 8 states doing joint attainment modeling. There was some discussion about whether a 2 to 3 ppb difference in ozone concentrations on certain days was significant; Bruss and Eagan said this figure is significant and can mean the difference between attainment and nonattainment of the ozone standard at several monitoring sites.

Continuing the attainment modeling discussion, Pat Stevens asked why DNR was using 1991 data; Bruss said the modelers are using 1991 meteorological data along with the most recent available base emissions data (1996). Fassbender asked about criteria for choosing which episodes to use in the model and whether there was a scenario in which the choice of episode could lead to a different result (passing instead of failing the attainment test). Bruss replied that such a scenario was possible but that EPA’s modeling protocol spells out what kinds of ozone episodes to use and doesn’t allow states to pick and choose which scenario is most likely to pass. Bruss noted that Wisconsin did not pass the statistical test on any of the dates being modeled, nor would it pass the weight of evidence test. Thus the bottom line is that Wisconsin has not yet achieved enough emission reductions to reach attainment of the 1-hour ozone standard. Bruss outlined some adjustments the eight states will make to their emissions databases to improve the reliability of the modeling results. He also noted that EPA’s estimate of isoprene emissions from oak trees appears to be double the amount of actual emissions; the result is that isoprene may play too big a role in the current modeling. This might affect results associated with one or two of the four episodes.

Fassbender said that even though Wisconsin is committed to working with the other seven states, it appears that Wisconsin passes the weight-of-evidence test even though the eight-state region as a whole fails the test. He said this would be a good argument for Wisconsin developing its own attainment demonstration, separate from the other states. Bruss replied that Wisconsin contributes to nonattainment in western Michigan, and we can’t expect upwind states to help us if we don’t help states that are downwind of us. Fassbender said he thought we should forget about public health issues for this submittal; the legal consideration is developing an attainment test for Wisconsin, and helping other states attain the standard would be a political decision. Bruss said he disagreed completely, and that all states that contribute to the region’s ozone problem need to help fix it. Fassbender replied that the Clean Air Act requires each state to show attainment for itself, so we don’t have to show how Michigan will meet the standard; Bruss said he disagreed wholeheartedly. Tanace Matthiesen asked what would happen if other states did not cooperate with Wisconsin as much as Wisconsin is cooperating with them; Lloyd Eagan replied that the other states are cooperating very well with Wisconsin and we can’t expect to do less than other states are doing. Eagan said Governor Thompson wants the state to avoid any legal battles with nearby states. Fassbender said it’s arguable that Wisconsin is a “receptor state” and thus should not have to make as many reductions as others. Fassbender asked if EPA would allow Wisconsin to assume what the “boundary conditions” are for Wisconsin only (how much ozone and precursors are entering Wisconsin) and, if need be, allow the state to submit its own attainment demonstration? This would not necessarily clean up the air. Bruss replied that if a state wants to take credit for the upwind reductions spelled out in the NOx SIP call, the state must implement the NOx SIP call emissions controls. In response to Ken Yunker, Bruss said that Wisconsin needs to develop a control strategy to bring two monitors (She-

boygan and Harrington Beach) into attainment. If neighboring states don't reduce their emissions, the model will show even higher ozone levels (thus worse exceedances) at these monitors. Martin David asked if DNR could provide those figures to the Task Force, to show how much worse Wisconsin's modeled exceedances would be if other states don't make those reductions.

Bruss then presented monitoring data for 8-hour average ozone concentrations in the four Lake Michigan states. Currently all monitors in ozone nonattainment areas in the region have 8 hour averages above 85 ppb (taking the fourth highest 8-hour average over the 3-year period 1997-99), indicating continued violation of the 8-hour standard. Bruss said Wisconsin has a lot of work to do just to meet the one-hour ozone standard, and based on the 8-hour figures we won't be able to get rid of all the adverse health effects, so we should do as much as possible to reduce overall ozone levels and thus mitigate those effects, rather than just doing what is required to attain the 1-hour ozone standard. Fassbender said that, for the record, the state's job is to comply with Clean Air Act requirements for the attainment demonstration; the idea of cleaning up other states' air and addressing an unenforceable health standard should not be part of the analysis. If Wisconsin can produce a one-hour attainment demonstration, he said, it would be great to do this in tandem with other states, but a joint agreement is not necessarily what Wisconsin needs to do to show attainment. It's a huge assumption, he continued, that other states will make any more reductions unless we make more reductions that are at least as stringent as theirs. For the record, Fassbender said, his point is that Wisconsin should do what is needed to show attainment within the state, especially given the very short timeframe we have to develop a lot of new rules and requirements; thus the first hurdle to jump should be the legal hurdle, not the highest (air quality) hurdle. In response to Ed Wilusz, Bruss said that LADCO would model a strategy that would not include NOx controls on northern and northeastern Wisconsin facilities. Pat Stevens asked why we are doing this for Michigan; Eagan replied that one of our main arguments is to do this for the health of our citizens who are suffering from ozone more than in other states, as shown by summer 1999 monitoring data.

**Update on attainment plan development** – Bob Lopez said it will be much harder to develop an attainment plan without the certainty of the reductions outside Wisconsin that were required in the NOx SIP call. Wisconsin has had a waiver from imposing NOx controls in southeastern Wisconsin, but that waiver will probably go away by late January 2000 because Wisconsin no longer has technical data to support continuing the waiver. The DNR is working on developing an ozone attainment plan that focuses on the one-hour standard but is sensitive to the health issues involved in the 8-hour ozone standard. While the attainment test is complicated, there's no 'bright line' showing exactly how much reduction is needed to meet it. Lopez said DNR expects to see two tiers of agreements on multi-state control of NOx emissions. Since DNR is charged with managing air quality as well as meeting federal standards, we cannot just ignore the 8-hour health standard, so any multi-state agreement will need to be sensitive both to attainment demonstrations and to public health issues. DNR is open to dialog about whether to develop agreements regarding either aggregate emission budgets or discrete control programs for the various emission sectors. Secretary Meyer and his counterparts in the other 7 states have told us the basic multi-state agreement must be worked out by February 2000 so that we will have time to work the agreements and related rules through the Natural Resources Board and the Legislature prior to the December 2000 deadline for submitting the attainment plan. Lopez noted that at this time, EPA was deciding on whether to approve states' Phase 2 State Implementation Plans that were submitted in April 1998. Due to last spring's court actions, EPA no longer can require use of the NOx SIP call to get emission reductions to meet the ozone standard. Tom Walker said he and others are concerned about the perception of equity among the states; many people will want to see Wisconsin's current situation as compared with where we were several years ago, relative to what other states are doing to reduce their emissions. He asked DNR to provide to the Task Force a matrix showing 1990 VOC and NOx emissions for each of the 8 states involved in the multi-state agreement, compared with their most recent emissions data, as well as what control programs they've committed to. Lopez said this could be put together and thanked Walker for his input.

Lopez said the 8 states are working on a regional NOx control program for large NOx sources, separate from the regulatory package required for the Phase 3 SIP submittal as well as from the regulatory package DNR put together for the NOx SIP call. The large-source NOx control program would be a separate program, hopefully involving emissions trading. Bob Fassbender said this sounded like DNR was implementing the NOx SIP call. Eagan replied that DNR is not assuming statewide controls on NOx sources at this point. Fassbender said his concern is that the schedule for making agreements with other states could make it very difficult for stakeholders to give input in a timely fashion. He asked when DNR planned to discuss with stakeholders the need to control sources beyond southeastern Wisconsin as part of the one-hour attainment demonstration. Eagan said this would be addressed before the department decides which rule to present to the Natural Resources Board in March 2000. Hank Handzel

asked whether DNR plans to get input from stakeholders before signing any interstate agreements; Eagan said yes, the meeting today as well as those in December and January are opportunities for input.

Lopez noted that if EPA revokes the NOx waiver, that would trigger Reasonably Available Control Technology (RACT) requirements for NOx sources in southeastern Wisconsin. Sources subject to NOx RACT could have to put on additional controls beyond what would be required by the seven modeling strategies being studied for the attainment demonstration, primarily because smaller sources could be affected, based on sources' Maximum Potential to Emit, rather than BTU input. Based on current modeling information, DNR doesn't believe it makes sense to continue the waiver. Kris McKinney asked what formal process is being used to determine "net air quality benefit;" Lopez replied that DNR is basically using a "weight of evidence" approach concerning the proportion of modeling "grid cells" in which the NOx waiver positively or negatively affects air quality. DNR will need to negotiate with EPA on the timing of the demise of the NOx waiver, as we don't want to ask for an unreasonable time-frame for implementing NOx RACT. Lou Skibicki said his concern was whether emission offsets for new sources would involve RACT or Best Achievable Control Technology (BACT). Kathleen Standen asked whether RACT would be required only in the six severe ozone counties (Kenosha, Milwaukee, Ozaukee, Racine, Washington and Waukesha) or would be extended beyond that area; Lopez said DNR assumes at least nine counties would be covered, but this could be extended to any county whose NOx emissions affect a Wisconsin nonattainment area. At this time DNR has not identified the western boundary.

Lopez then presented slides on some preliminary discussions about NOx cutpoints related to the vehicle inspection/maintenance (I/M) program. The Mobile Sector Technical Advisory Group probably will meet one or more times to discuss possible approaches, which will eventually be developed in the I/M work group beginning in December 1999. The issue is whether the pass/fail cutpoints for NOx emissions detected in I/M tests will remain if the waiver goes away. In the early 1990s it made sense for DNR to hold off on local NOx controls; now, however, our technical analysis shows such controls would make sense. Lopez also said Wisconsin continues to get air quality improvements from control programs started in the early to mid 1990s. DNR has identified some additional controls that can be put in place to meet Wisconsin's remaining obligations for "rate of progress" reductions. This does not necessarily mean new or additional rules. Assuming the NOx waiver is revoked, Wisconsin's baseline and future emission calculations will be affected; we will also have to calculate potential outcomes of not being able to use NOx reduction credits if the waiver were to remain in place. Lopez also said Wisconsin has not yet fulfilled its rate of progress reductions for 2002.

New federal standards on off-road engines, on-road vehicles and fuel quality, Lopez said, offer some possibilities for emission reductions, and DNR hopes to get as many reductions from these rules as possible, including taking credit for these rules in the attainment plan. EPA says that we can take credit for the proposed (and soon-to-be-finalized) new tailpipe and gasoline standards in Wisconsin's transportation conformity plan if we want to, and DNR will probably recommend incorporating this into the phase 3 SIP submittal next year. Tom Walker asked if this meant that the state's transportation emission budget will be part of the phase 3 SIP package that will need to be approved by the Natural Resources Board, and if so, does DNR plan to ask the NRB to approve the interim transportation budget. Eagan said that this budget would not have to be approved by the NRB because the board only needs to approve SIP amendments that change DNR pollution rules. Lopez said the transportation conformity work group probably would recommend not including reductions from possible Tier 2 low-sulfur fuel in Wisconsin's proposal, even though we need those reductions ultimately to attain the ozone standard. These numbers will be discussed formally at the December 3 conformity work group meeting, as well as at the December 10 Task Force meeting. We did not submit these figures in our April 98 SIP submittal, which is why EPA has deemed it to be inadequate. Ken Yunker said that if the transportation budget shows projected emissions are greater than current emissions, all transportation projects will be cut off. Lopez said DNR is on target to get the entire package together by the end of 2000; since the legislature will probably adjourn in early fall of 2000, we will need to get the entire package through the full NR Board process by August 2000. Kathleen Standen asked about the mechanism for states to join a multi-state agreement; Lopez said there were several options, including as a regional ozone transport commission.

**Other meetings** -- Eagan suggested scheduling several meetings in early and late January, mid February and early March (see page 1).